

PT-AMR limit switch



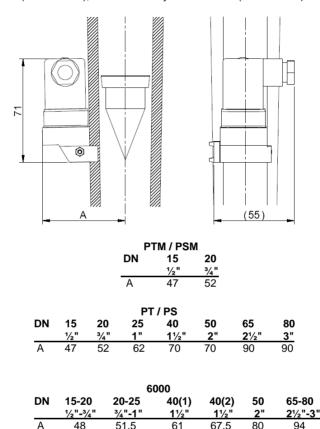
For series PT, PTM, PS, PSM and 6000

Instructions manual



INTRODUCTION

The PT-AMR is a magnetically operated bi-stable reed switch, operated by the magnet in the flowmeter's float. The limit switch can be supplied as a normally open switch when the float is below the switch (PT-AMR NA), or as a normally closed switch (PT-AMR NC).



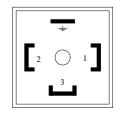
ELECTRICAL CONNECTION

For the electrical installation, a multi-conductor cable should be used to obtain a good seal with the cable gland. The connector is provided with a PG 9 cable gland, suitable for a 4.5 to 7 mm outside diameter cable. Terminals 1 and 2 of the connector are connected to the two ends of the reed switch.

In the female connector:

Terminal 1: Reed switch contact Terminal 2: Reed switch contact

Terminal 3: No connection Earth terminal: No connection



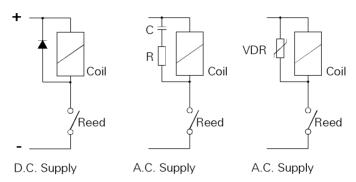
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Make sure that the contact rating is not exceeded. If high loads are to be switched, use an auxiliary relay.

When using inductive loads, such as relays or electro-valve coils, surge arresters should be installed to protect the reed contacts.

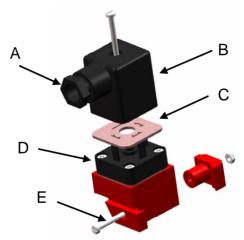
With a DC supply, a diode should be connected as shown.

For an AC supply, a RC circuit can be used as shown, although a varistor (VDR) is better and is easier to select the right value. The VDR should have a breakdown voltage greater than 1.5 times the rms voltage. The standard varistor ratings specify the rms working voltage for the varistor, for example a S05K25 varistor will be for 25 Vrms working and will have a breakdown voltage of 39 V at 1 mA.



The electrical installation should provide a fuse or circuit breaker to protect the reed switch from overloads.

When installing the connector, make sure that the cable gland (A) closes over the cable and that the connector (B) with the rubber seal (C) is well screwed down to maintain the IP65 rating.



OPERATION

To install the PT-AMR on the flowmeter, loosen the screw (E) and clamp the limit switch on the guide opposed to the reading scale. The position of the reading point of the float with reference to the PT-AMR, when the switch acts, will vary from one type of float to another. With the float in a stable position, slide the PT-AMR along the guide until the reed switch changes over. Mark the position of the reading point of the float on the PT-AMR and then situate this mark at the required switching level on the scale. Tighten the clamping screw (E).

If the limit switch must be changed from a PT-AMR NC to a PT-AMR NA or vice-versa, first remove the female connector (B) and the rubber seal (C). Remove the 4 screws that hold the male connector (D), withdraw the connector, rotate it 180° and then reassemble the complete unit, taking care that the seals are properly fitted to maintain the ingress protection.

MAINTENANCE

No special maintenance is required.

TECHNICAL CHARACTERISTICS

Standard DIN 43650 connector

Contact Rating:

Maximum Switching Power: 12 VA
Maximum Switching Voltage: 250 VAC
Maximum Switching Current: 0.5 A

Working Conditions:

Ingress protection: IP65

Ambient Temperature: -20 °C to +80 °C

Conforms with the Directive 73/23/EC

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WARRANTY

Tecfluid S.A. GUARANTEES ALL ITS PRODUCTS FOR A PERIOD OF 24 MONTHS, after consignment, against all defects in materials and workmanship.

This warranty does not cover failures which can be imputed to misuse, use in an application different to that specified in the order, the result of service or modification by un-authorized persons, bad handling or accident.

This warranty is limited to cover the repair or replacement defective parts which have not been damaged by misuse.

This warranty is limited to the repair of the equipment and all further and eventually following damages are not covered by this warranty.

Any consignment of equipment to our factory or distributor must be previously authorised. The consignment should be done with the equipment well packed, clean of any liquids, grease or hazardous materials.

Together with the equipment, a note should be enclosed indicating the failure observed, the name, address and telephone number of the sender.

SHIPPING

In the event of damages during shipping, claim directly to the carrier over a period of less than 24 hours. Tecfluid is not responsible for any damage caused during the shipment of material.

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